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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,638	09/16/2003	Peter L. Bakos	03023256	1908

26565 7590 06/07/2005

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EXAMINER
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GALL, LLOYD A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,638

Applicant(s)

BAKOS ET AL.

Examiner

Lloyd A. Gall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-14 and 19-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The disclosure is objected to because of the following informalities: On page 6, line 4, a period should follow the end of the line.

Appropriate correction is required.

It is noted that applicant requested that paragraph [0016] be amended, however, there is currently no paragraph labeled as [0016] in the specification.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the battery cell must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

It is also noted that the drawings are informal, and that new, formal drawings are required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The written description must provide support for the "planar surface" throughout the claims, as well as the "top surface" of claims 20 and 22.

Claims 1, 8 and 20-22 are objected to because of the following informalities: Claims 1 and 8 are not clear as to what surface is being defined as a planar, top surface. Claim 1 currently ends with two periods. In claim 21, a space should separate "claim" and "8". Appropriate correction is required.

In view of the above claim objections, the claims are rejected as best understood, on prior art, as follows.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (914).

Lee et al teaches a bolt 500 used in a battery cell environment, including an enlarged head portion 502, a sealing, tapered portion also labeled 502 in figure 7 directly above

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the threaded portion 504, a subassembly 414 having a top, planar surface at its free end or a planar surface defined by the interior threads 412, wherein the sealing, tapered portion 502 of the bolt contacts the planar surface of the subassembly.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of Whitney.

Whitney teaches an integral washer 11 as seen in figure 1 which includes projection 12, and also wherein the washer is regarded as having semi-circular projections below the head flats as seen in figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a washer with the bolt head of Lee et al, in view of the teaching of Whitney, the motivation being to strengthen the bolt head of Lee et al. To form the head height to washer thickness of Lee et al as modified by Whitney to be 1.24 would have been obvious to one of ordinary skill in the art, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of McCarthy (934).

In column 3, lines 17, 18, McCarthy teaches a threaded body 11 formed of lead, for use in a battery environment. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to form the bolt of Lee et al of lead, in view of the teaching of McCarthy, the motivation being for use in an electrical connector.

Claims 1, 7, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of Landgrebe 749).

Lee has been discussed above. Landgrebe teaches a bolt 15 with a non-threaded portion 19 above the threaded portion 21, as well as a sealing, tapered portion 17 which bottoms against a planar surface 35 of a recessed portion 33 of an internally threaded body (B). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tapered 502, 414 abutment of Lee et al such that the tapered portion 502 abuts a planar surface of a recessed portion of the nut 412, 414, in view of the teaching of Landgrebe, the motivation being to prevent over-torquing of the bolt 500.

Claims 2-6 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of Landgrebe and further in view of Whitney.

Whitney has been discussed above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bolt of Lee et al to include a washer, in view of the teaching of Whitney, the motivation being to strengthen the bolt of Lee et al. To form the bolt head height to washer thickness of Lee et al to be 1.24 would have been obvious to one of ordinary skill in the art, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al in view of Landgrebe, or Lee et al in view of Landgrebe and Whitney as applied to claims 1 and 8 above, and further in view of McCarthy.

McCarthy has been discussed above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the bolt of Lee et al of lead, in view of the teaching of McCarthy, the motivation being for use in an electrical connector.

Claims 1, 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodall in view of Ackmann.

Woodall teaches a battery cell including a bolt head 18, a tapered portion below the head, a non-threaded portion, and a threaded portion 36 for use with a flat surface 22 of a subassembly 14, 22. Ackmann teaches a sealing portion 140 in figure 7 which contacts the flat surface of connector 124. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tapered portion of Woodall such that it contacts the flat surface 22, in view of the teaching of Ackmann, the motivation being to securely connect the elements together.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woodall in view of Ackmann as applied to claim 1 above, and further in view of McCarthy.

McCarthy has been discussed above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the subassembly 22 of Woodall of lead, in view of the teaching of McCarthy, the motivation being for use in an electrical connector.

Applicant's arguments with respect to claims 1-14 and 19-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

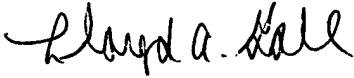
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LG LG  
June 2, 2005

  
Lloyd A. Gall  
Primary Examiner